DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 99.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-020096 Address: 333 Burma Road **Date Inspected:** 03-Feb-2011

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1500 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC) Chanxing Island **Location:** Shanghai, China

CWI Name: N/A **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Yes N/A N/A **Electrode to specification:** No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component: OBG Segment**

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance Inspector (QA), Vibin Kumar Selvanayaham, was present during the times noted above for observations relative to the work being performed.

This Quality Assurance Inspector reviewed the contract document, shop drawing, verified weld maps and also reviewed the work procedures.

Description of VT Observation:

During the Quality Assurance random visual inspection of welds located on Floor beam, deck panel diaphragm welds of OBG Segment 13BW, this Quality Assurance Inspector (QA) observed the following issues;

- -Linear Longitudinal Indications measuring approximately 200mm in lengths and punctured/burn through.
- -After back gouging, these indications were discovered visually and confirmed by Magnetic particle Testing (MT) by ZPMC MT personnel.
- -The indications are clearly marked on the material near the weld for further repair. The weld number is identified as SEG3014B-001. The panel point is identified as a PP122.
- -This weld is a CJP weld joining the Deck Panel Diaphragm to Deck Panel Diaphragm.
- -The Deck Panel Diaphragm to Deck Panel Diaphragm weld is identified as Seismic Performance Critical Member (SPCM).
- -The cracks are completely removed and re-weld shall be performed as per required contract document and approved WPS. For further information, Please see attached pictures.

Description of VT Observation:

WELDING INSPECTION REPORT

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During the Quality Assurance random visual inspection of welds located on Floor Beam at panel point 122 bike path side of Segment 13BW, this Quality Assurance Inspector (QA) observed the following issues;

- -Offset in a cope hole located at Floor beam to Deck Panel Diaphragm.
- -The offset is measured approximately 45mm in length.
- -The floor beam number is identified as FB3204A and Deck Panel is identified as DP3137A.
- -Floor Beam and Deck Panel Diaphragm are identified as Seismic Performance Critical Member (SPCM). OBG
- -Segment 13BW is located West Side of Bay 14 area.
- -According to the contract document ZPMC personnel need to submit Critical Weld Repair to the engineer prior to weld repair. For further information, Please see the attached pictures.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.





Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact, who represents the Office of Structural Materials for your project.

Inspected By:	Kumar, Vibin	Quality Assurance Inspector
Reviewed By:	Patel, Hiranch	QA Reviewer